

CLAIMS

What is claimed is:

1. A leak detection system for a flowing electrolyte battery comprising:
 - at least one manifold leak containment member associated with at least one manifold which provides flowing electrolyte to at least one stack of a flowing electrolyte battery; and
 - means for sensing a fluid leak within the at least one manifold leak containment member.
2. The system of claim 1 wherein the sensing means comprises:
 - at least one switch comprising a first plate and a second plate, wherein fluid within the containment member serves to electrically couple the first plate to the second plate, to, in turn, close the switch;
 - a controller associated with the switch, the controller capable of sensing the condition of the switch; and
 - a connector electrically associating the switch and the controller.
3. The system of claim 2 wherein the sensing means further comprises:
 - a resistor positioned in parallel to the switch.
4. The system of claim 2 wherein the at least one switch comprises a plurality of switches positioned in parallel.

5. The system of claim 1 wherein the at least one manifold leak containment member comprises a manifold leak containment member associated with each manifold of the flowing electrolyte battery.

6. A leak detection system for a flowing electrolyte battery comprising:

- at least one containment member associated with at least one manifold of a flowing electrolyte battery;

- at least one containment member associated with at least one stack of a flowing electrolyte battery;

- at least one containment member associated with an electrolyte reservoir of a flowing electrolyte battery; and

- means for sensing a fluid leak within one of the containment members, wherein the sensing means comprises:

- at least one sensor having at least one switch positioned within one of the containment members such that a leak collecting in the respective containment member triggers the switch;

- at least one controller associated with the sensor; and

- a connector associated with each of the sensor and controller.

7. The leak detection system of claim 6 wherein the sensor includes a plurality of switches.

8. The leak detection system of claim 7 wherein the plurality of switches are positioned

substantially in parallel.

9. The leak detection system of claim 6 wherein the sensor includes at least one resistor positioned in parallel with the at least one switch.
10. The leak detection system of claim 6 wherein the controller includes a means for signaling the condition of the sensor to a user.